

FIG. 1

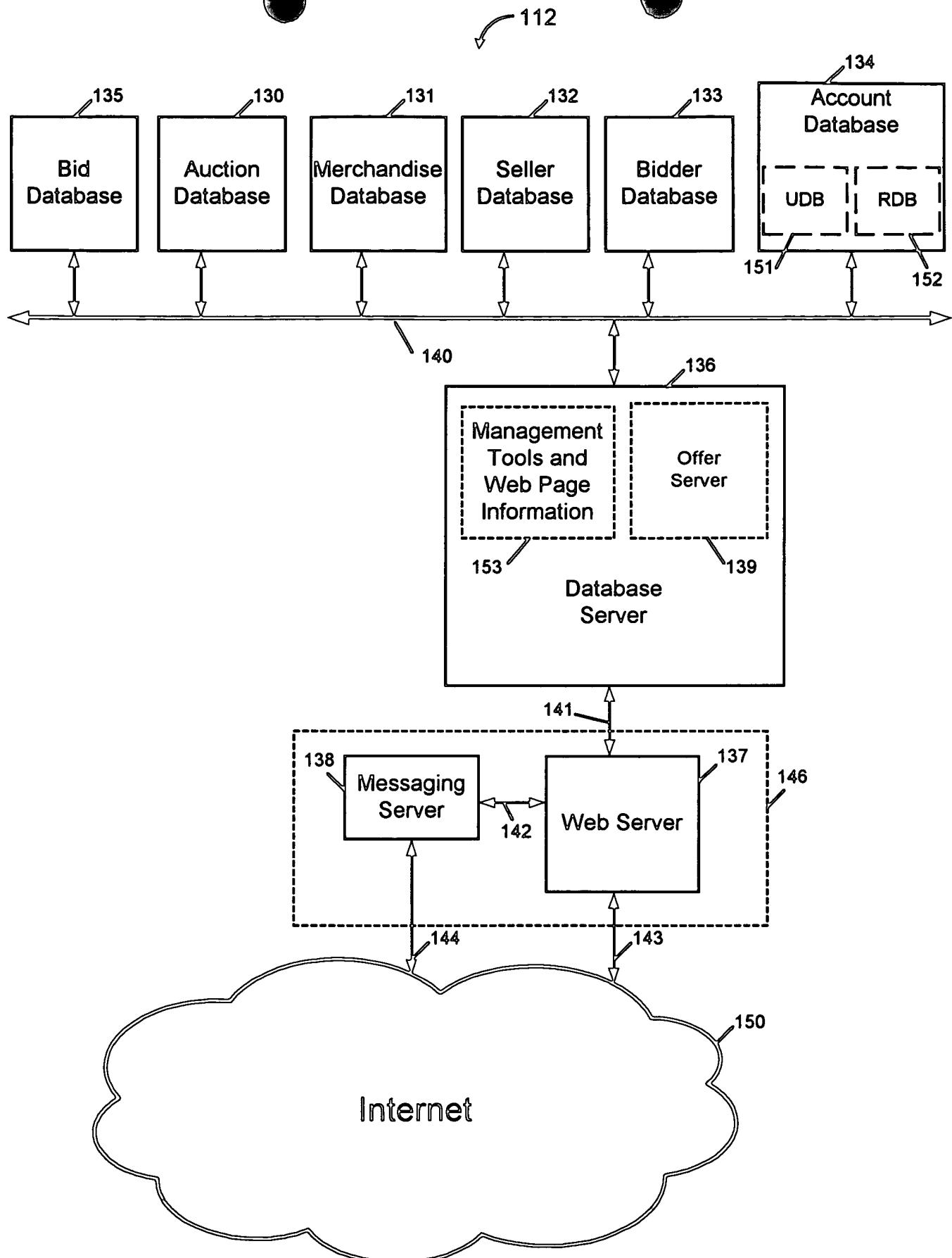
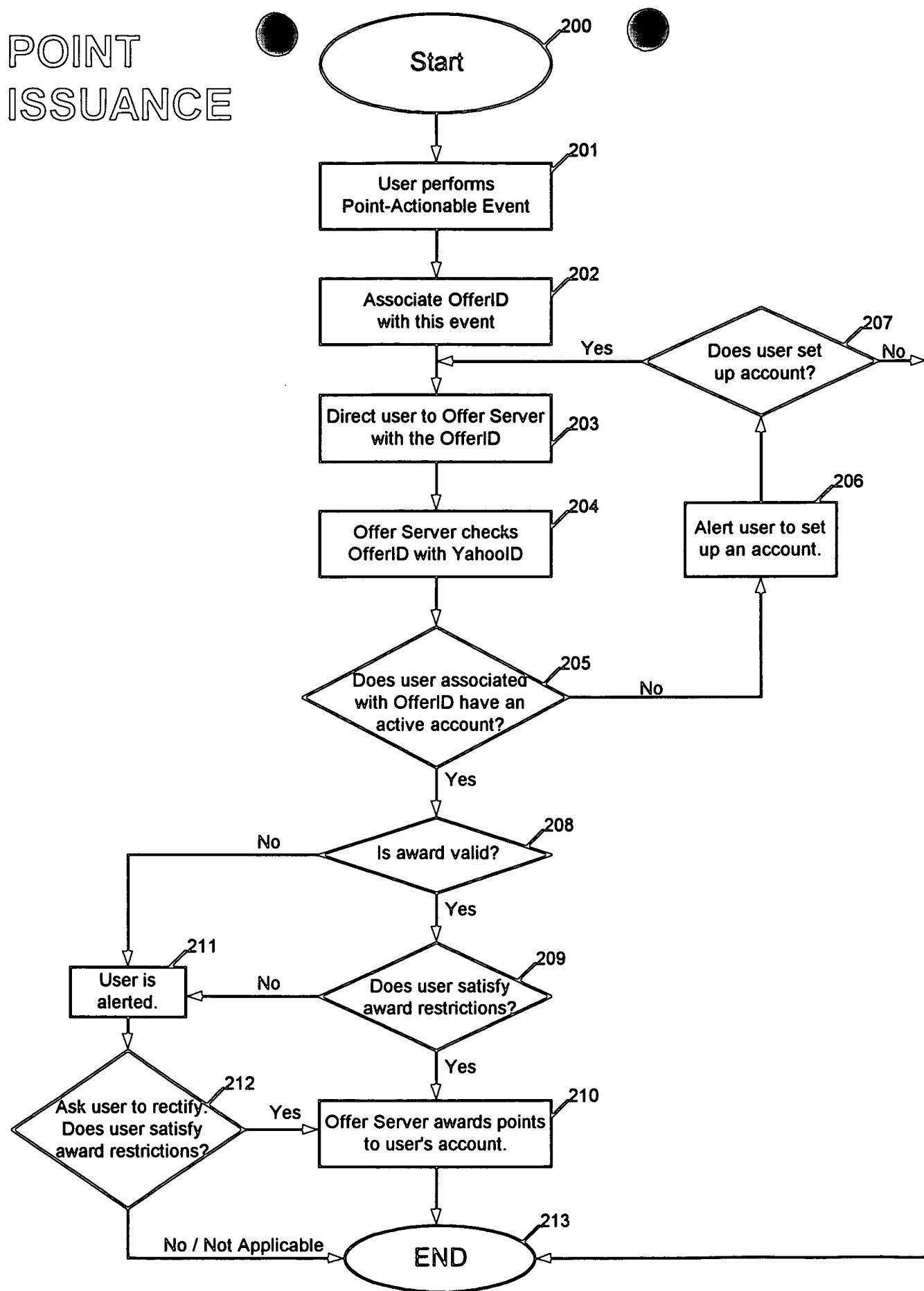


FIG. 2

POINT ISSUANCE



STANDARD AUCTION - SINGLE ITEM

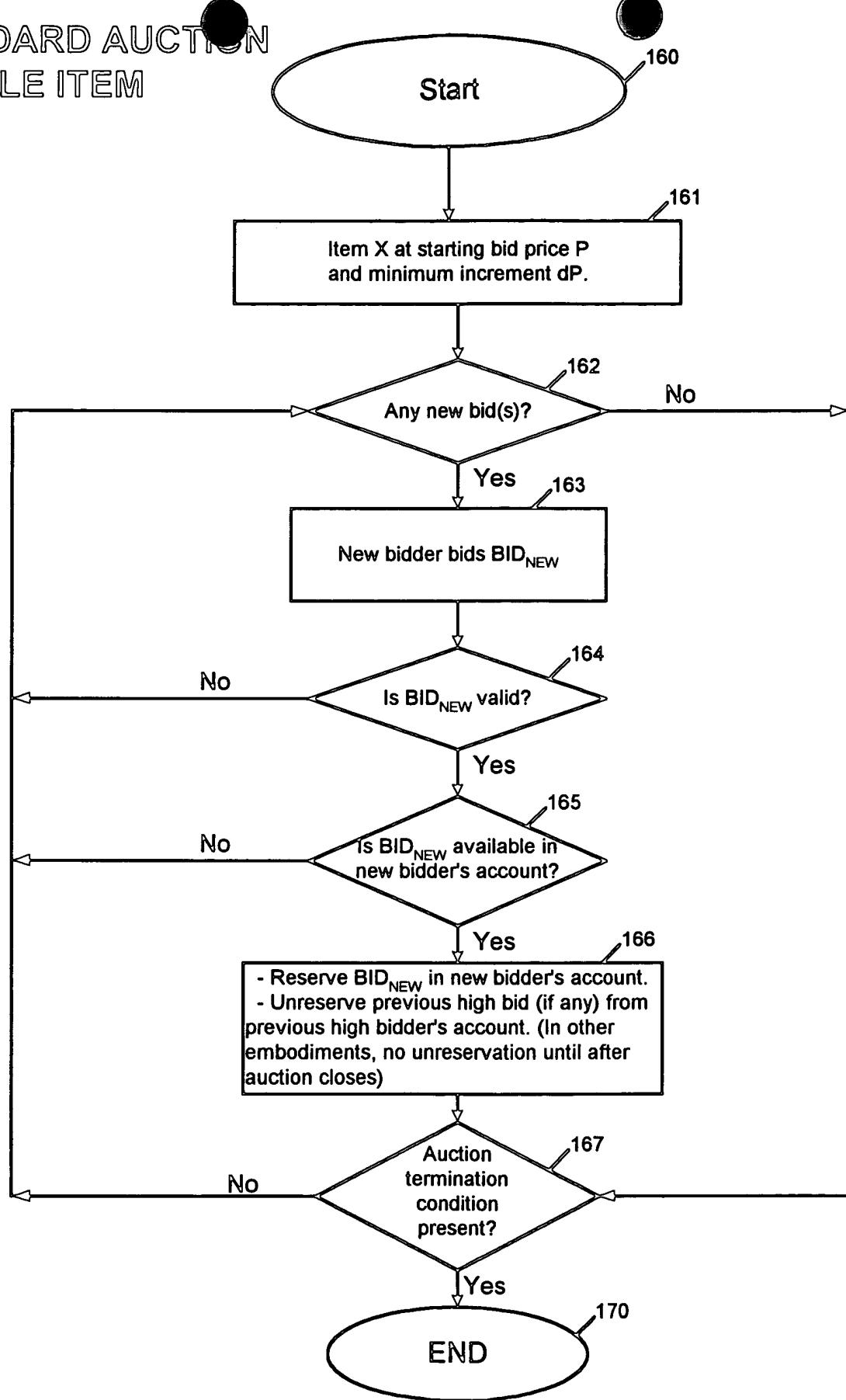


FIG. 4

STANDARD AUCTION
- MULTIPLE ITEMS

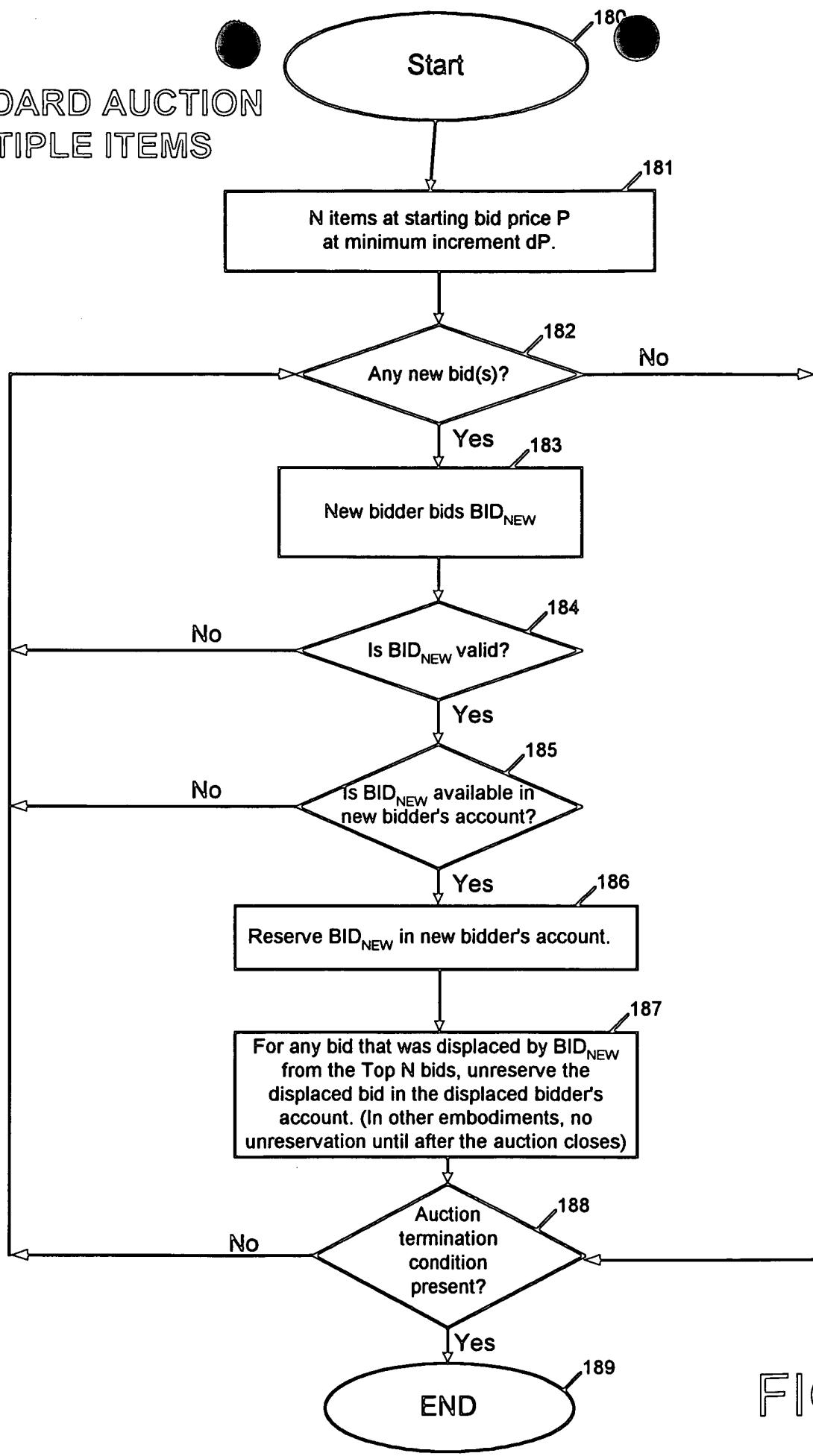


FIG. 5

DUTCH AUCTION -FIRST EMBODIMENT

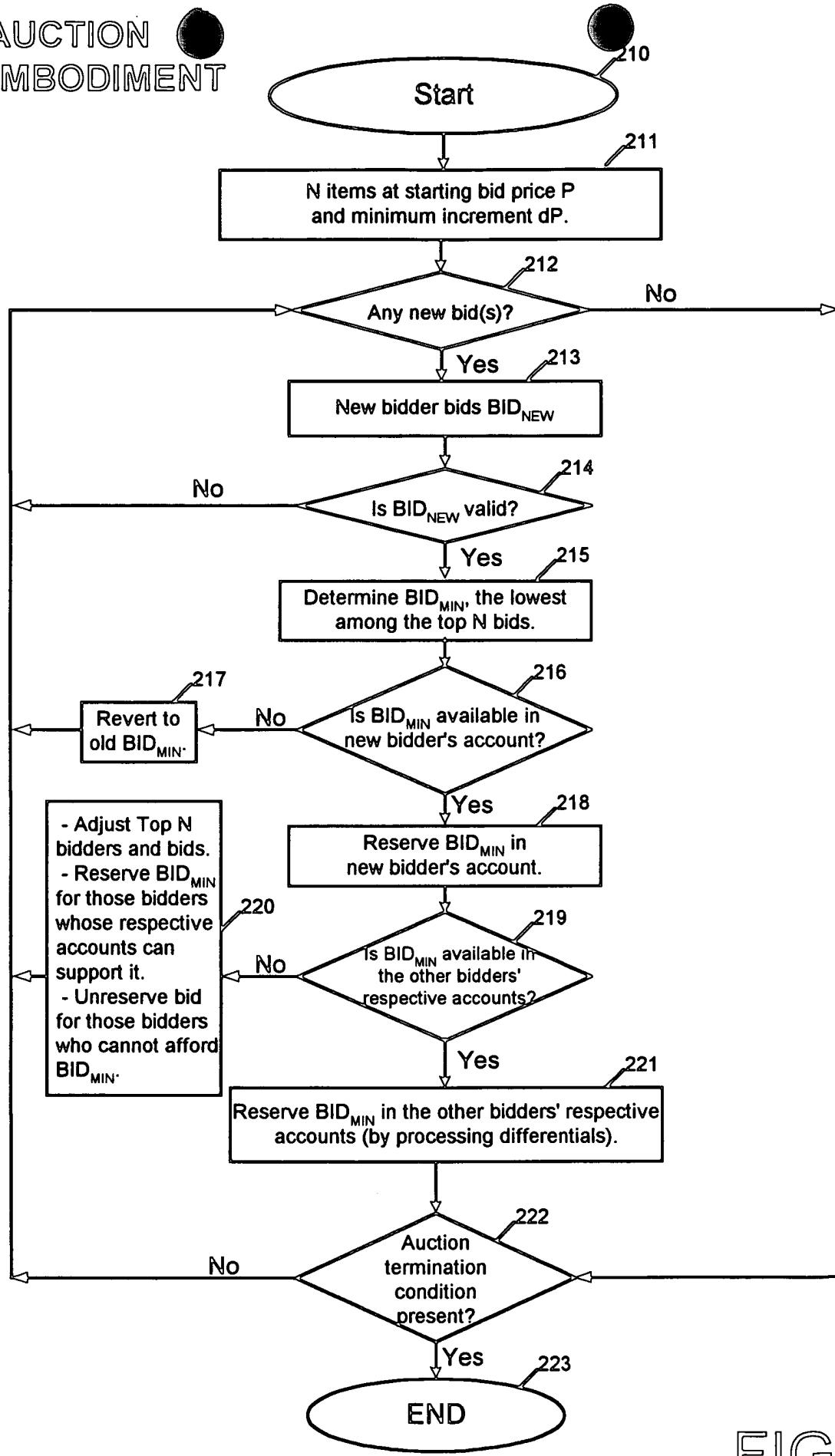


FIG. 6

DUTCH AUCTION - SECOND EMBODIMENT

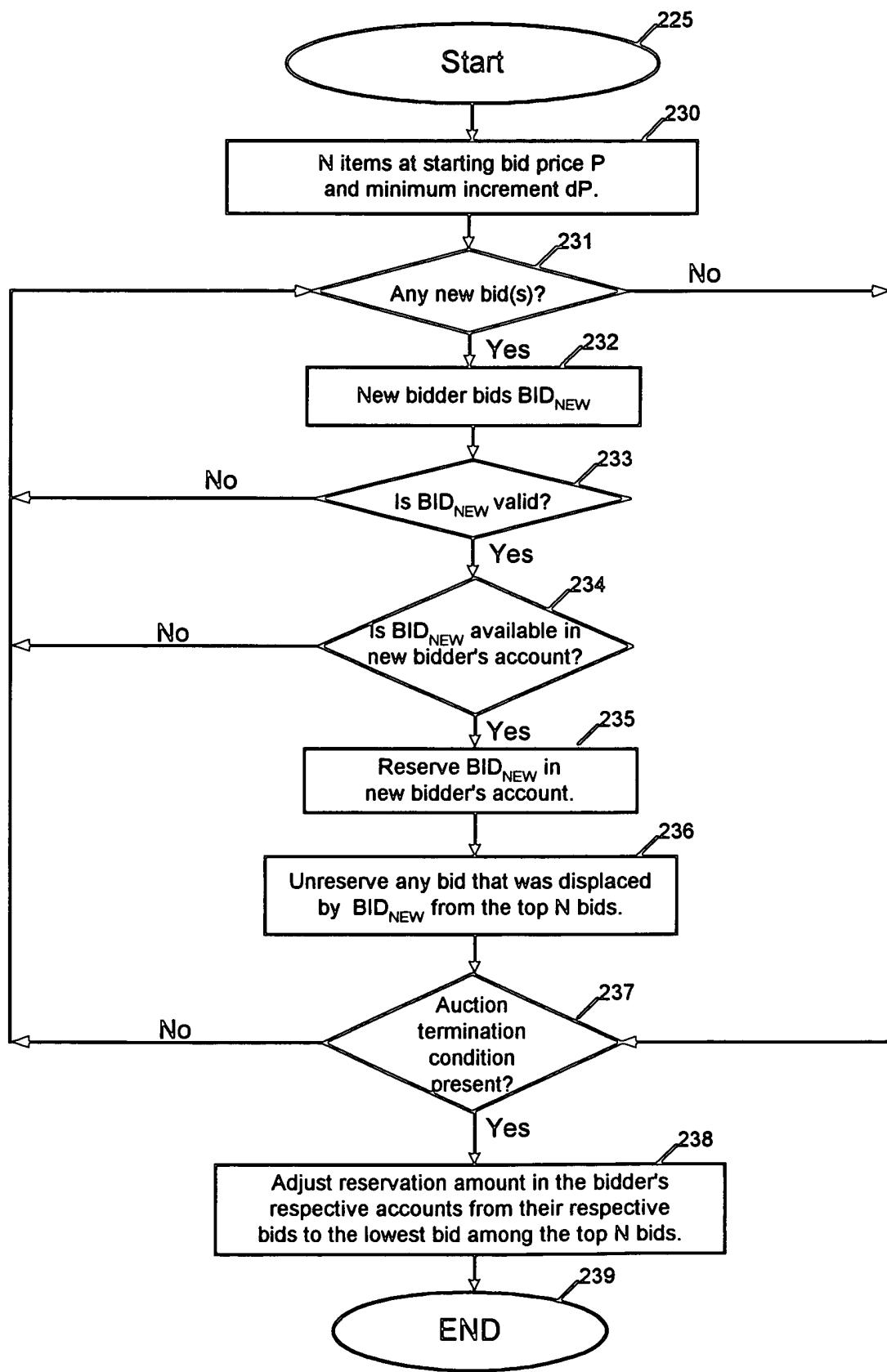


FIG. 7

PROGRESSIVE AUCTION

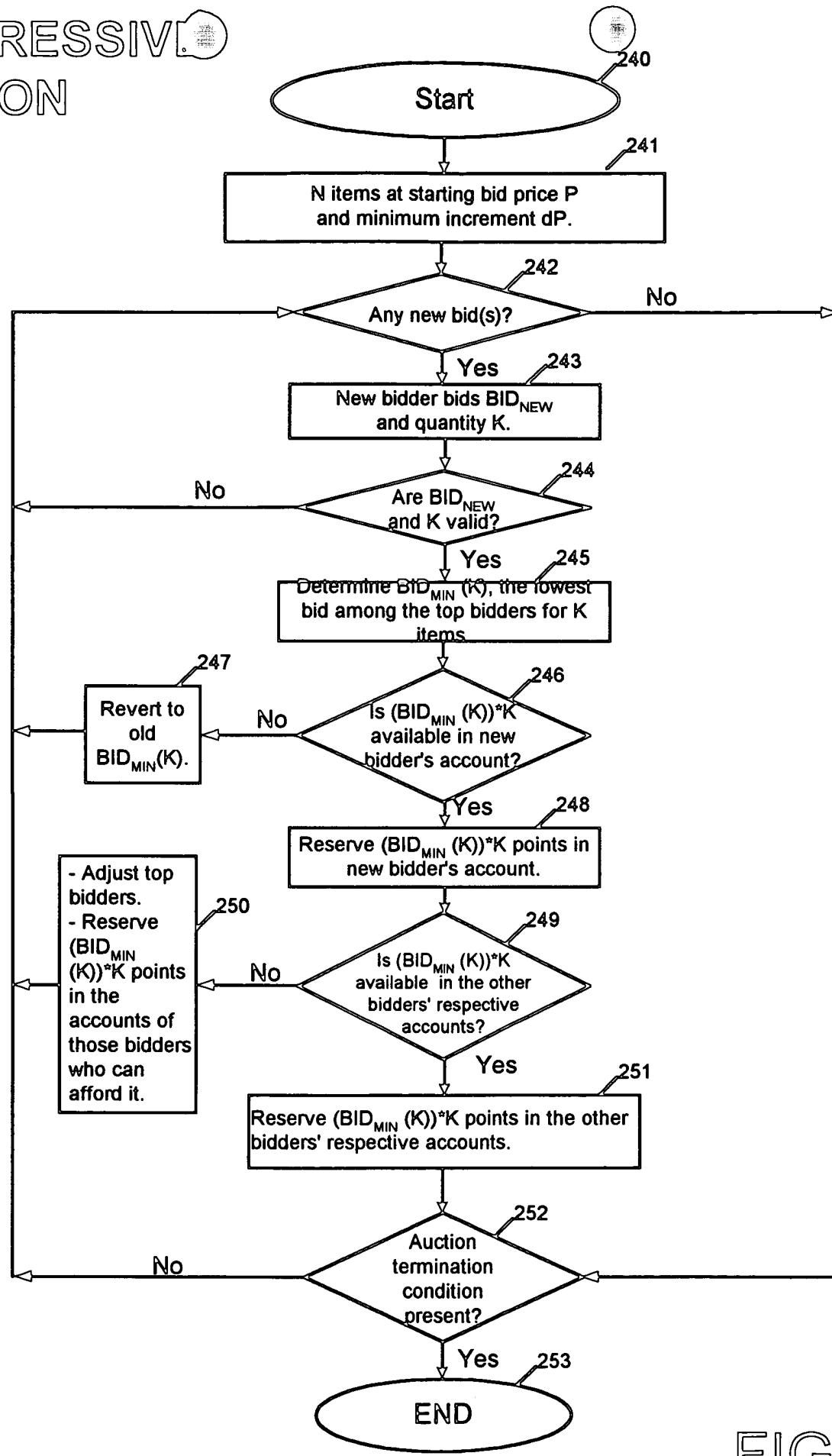


FIG. 8

BUY OR BID AUCTION

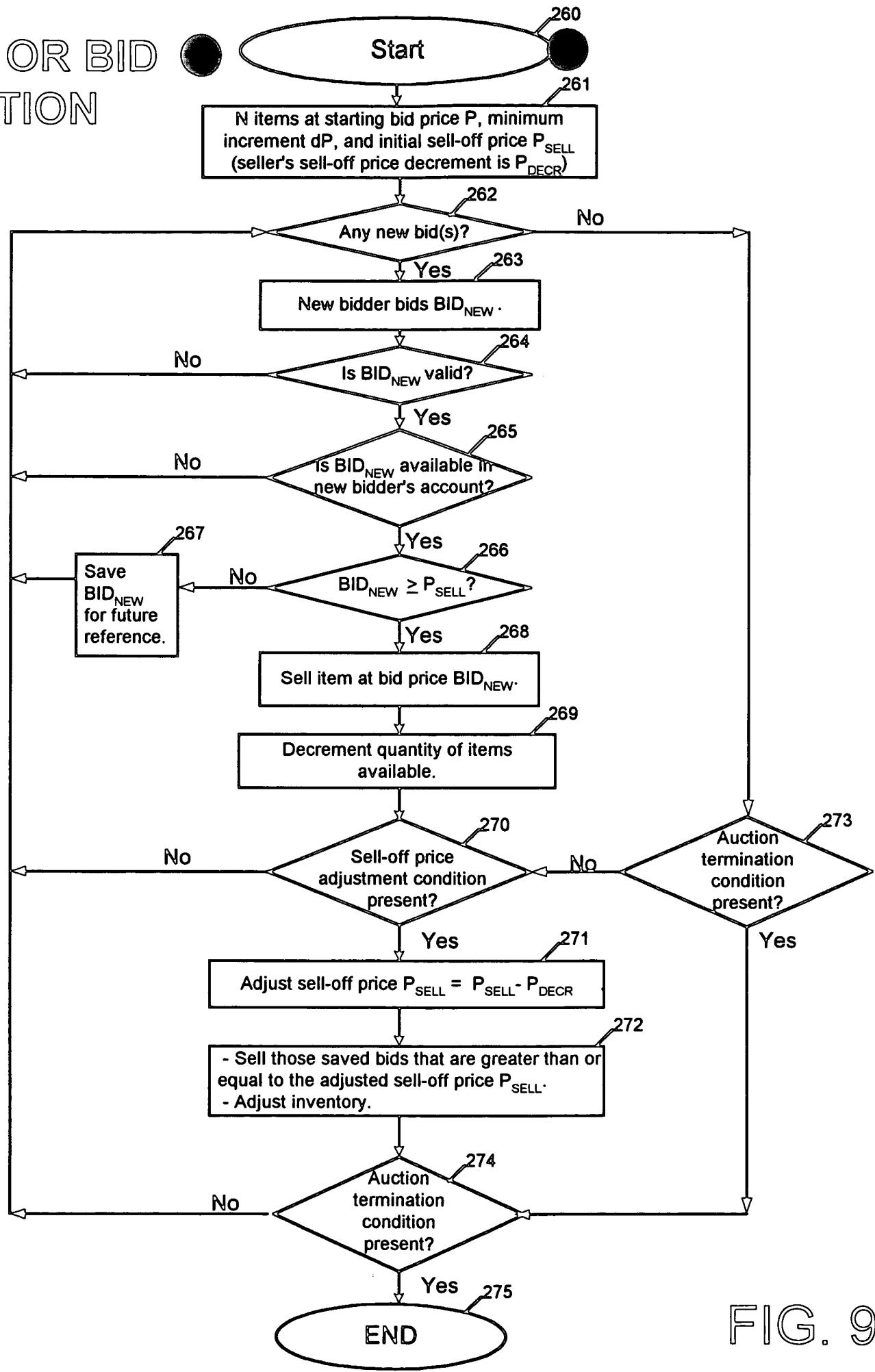


FIG. 9

AUTOMATED BIDDER

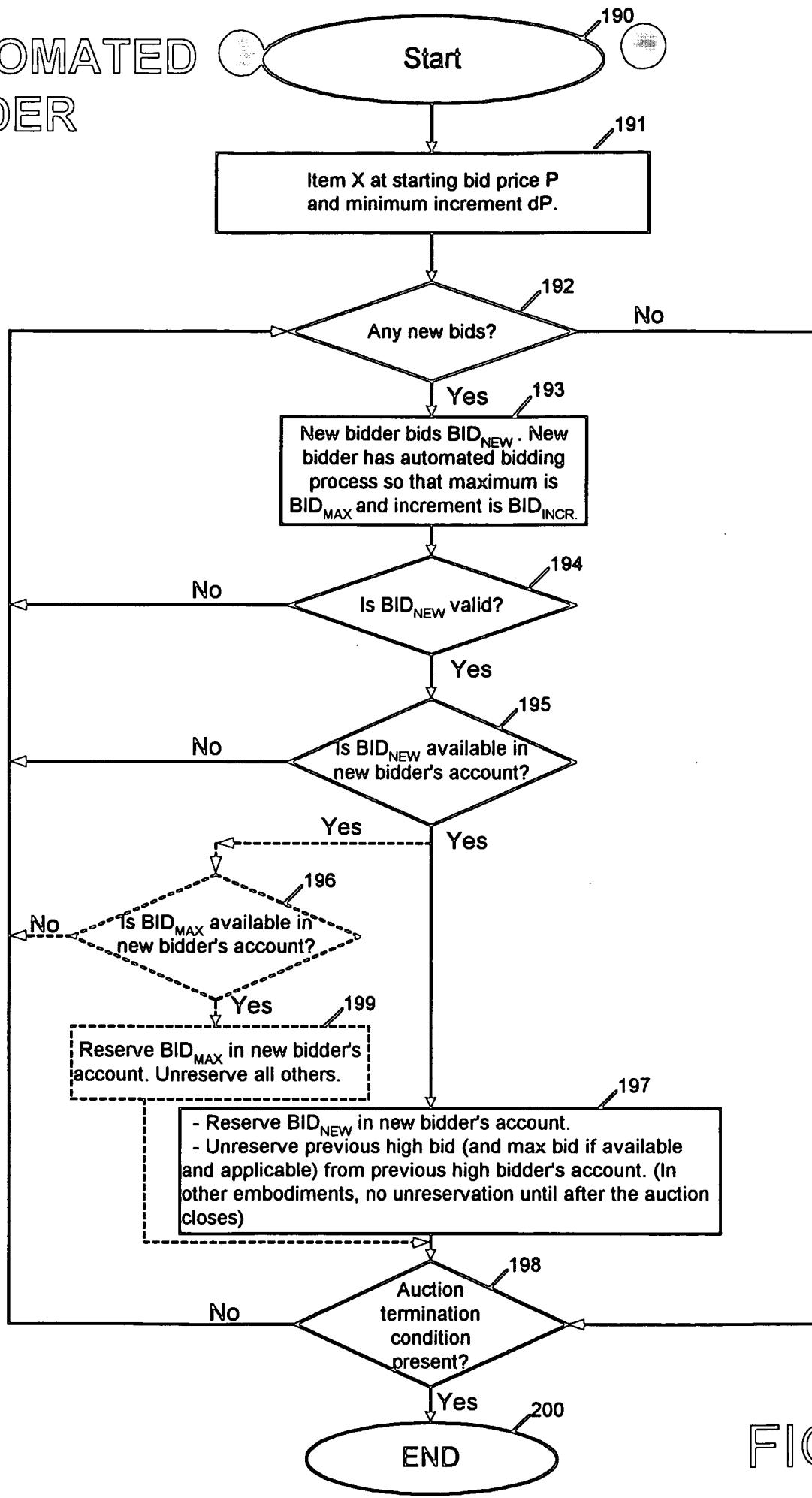


FIG. 10

DECLINING BID AUCTION

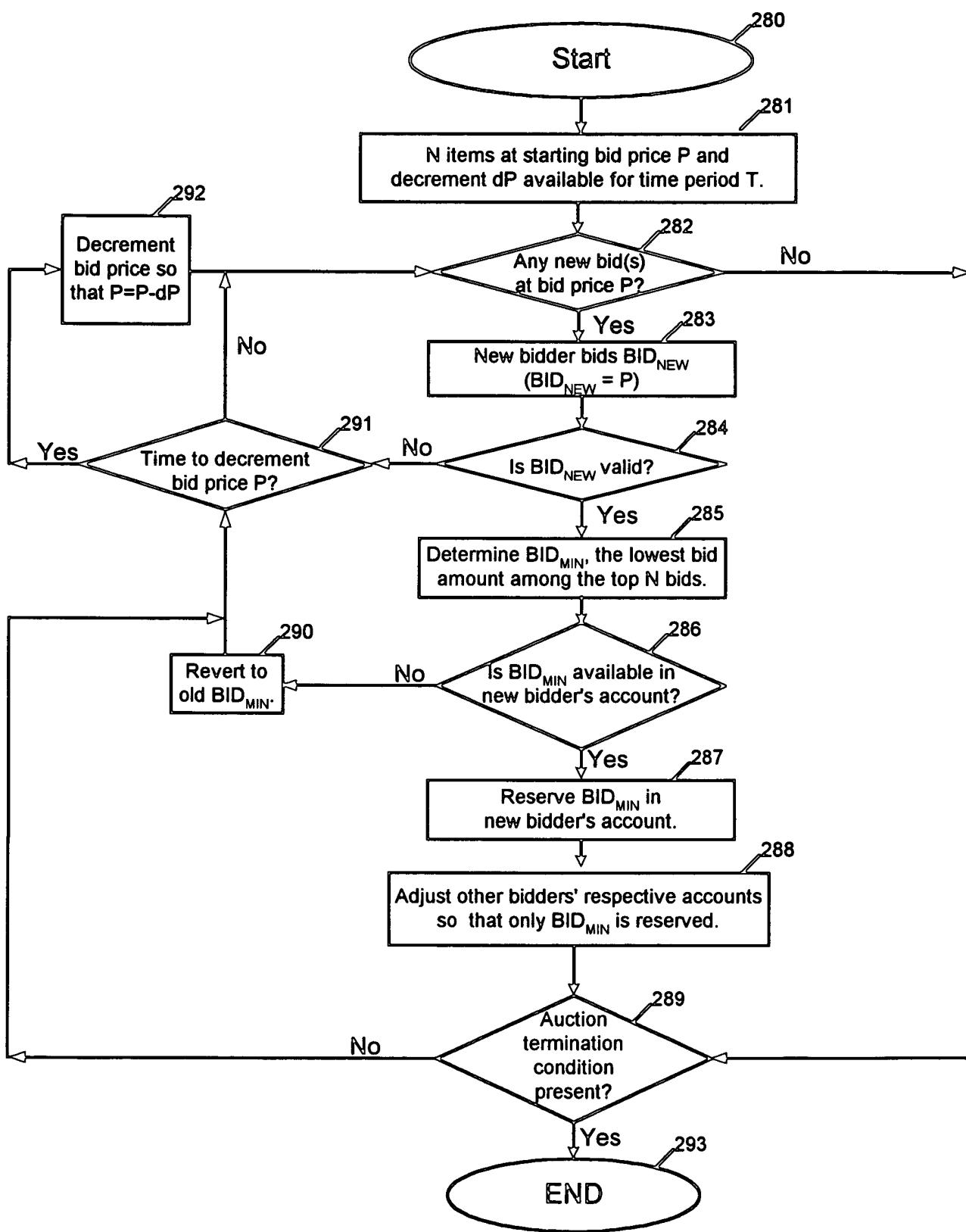


FIG. 11

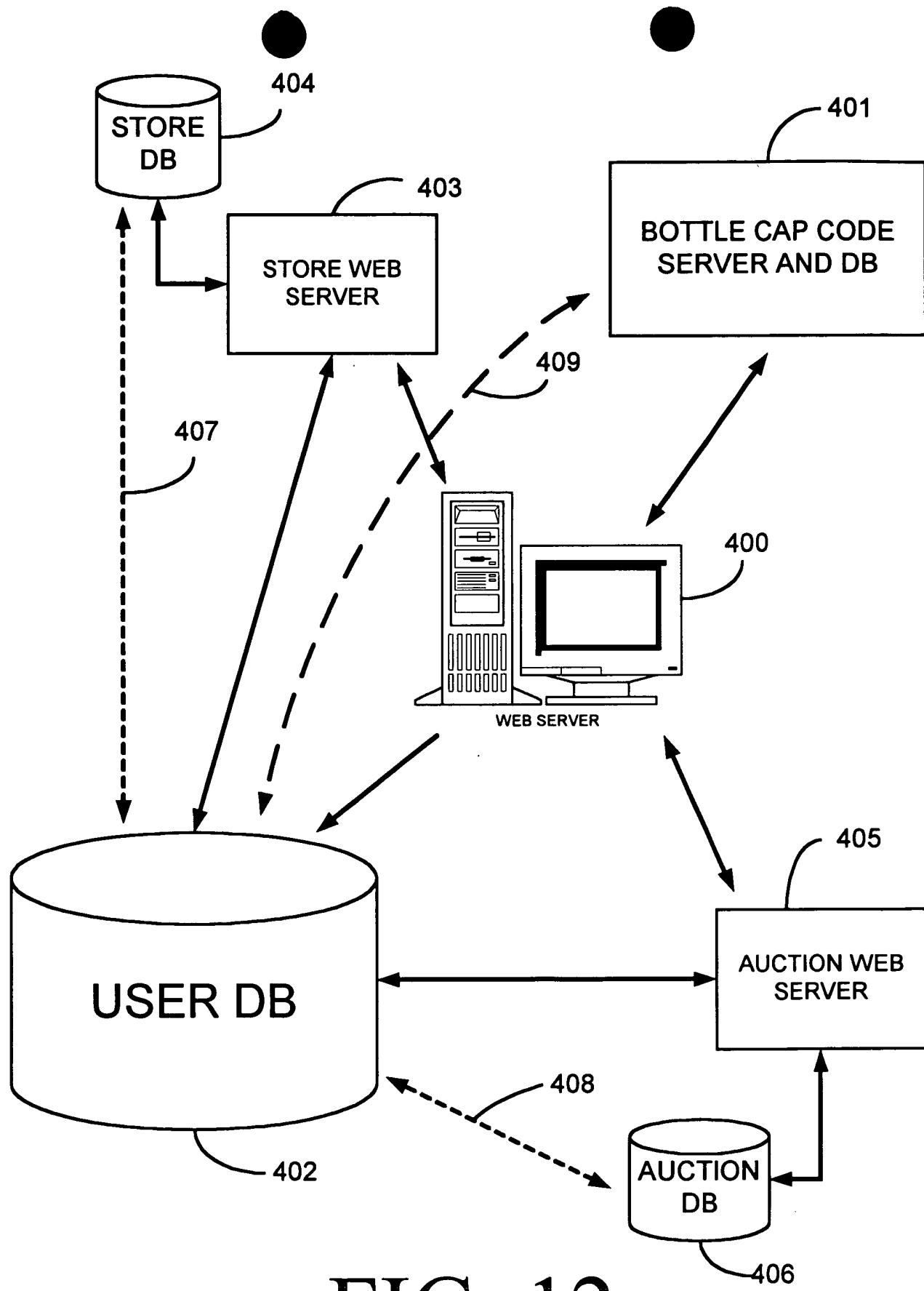


FIG. 12

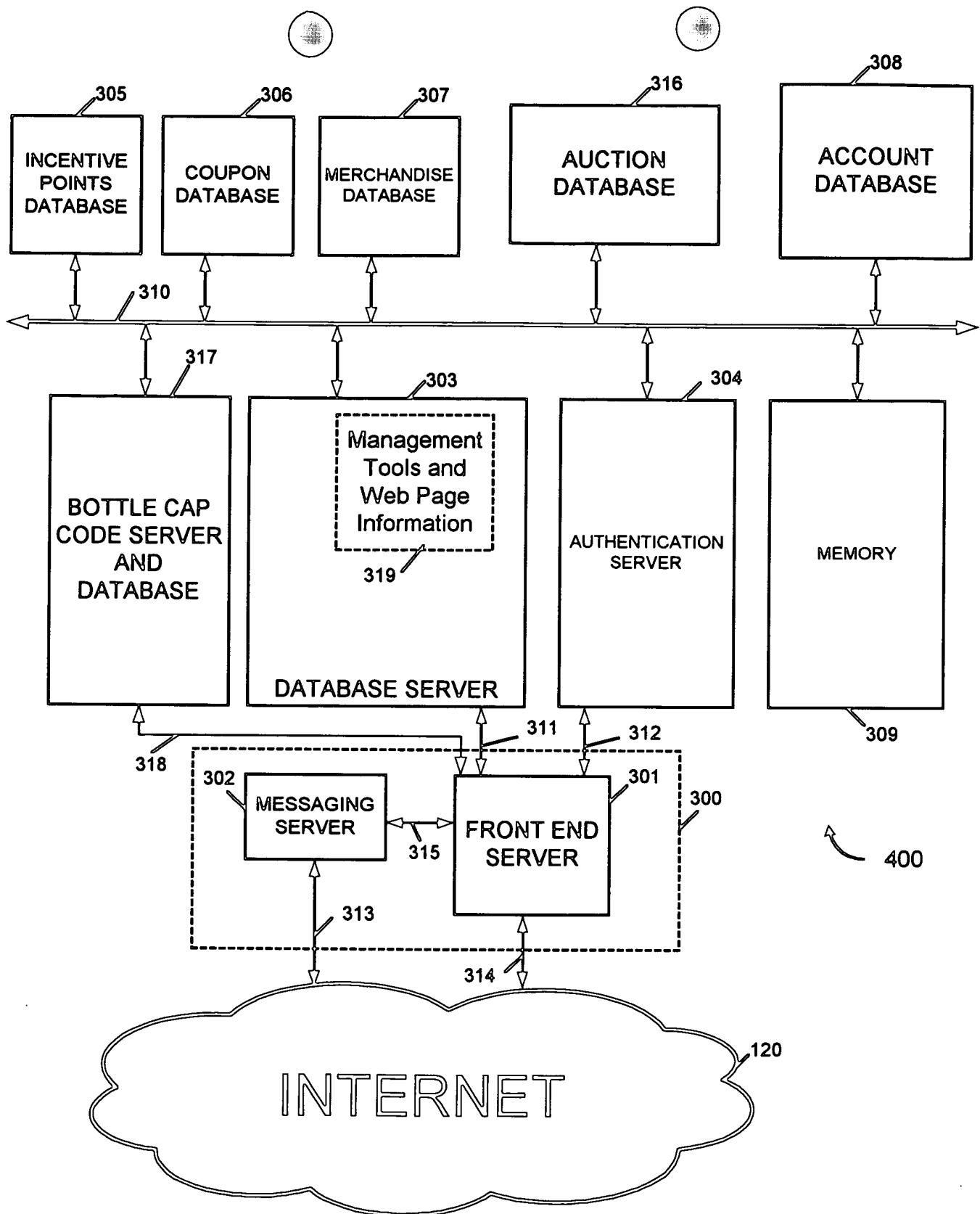


FIG. 13

XYZ CORP

BOTTLE CAPS POINTS PROGRAM

[CLOTHES](#)[TOYS](#)[ENTER
CODE](#)[MOVIES](#)[MUSIC](#)[VIEW
ACCOUNT](#)[TRAVEL](#)[ELECTRONICS](#)

FIG. 14(A)

XYZ CORP

BOTTLE CAPS POINTS PROGRAM

Please enter the 10-digit
code on the bottle cap:

[SUBMIT](#)[RETURN TO
PREVIOUS PAGE](#)

FIG. 14(B)

XYZ CORP BOTTLE CAPS POINTS PROGRAM

CONGRATULATIONS!!
YOU HAVE ENTERED A VALID
BOTTLE CAP CODE.

[CLICK HERE TO ENTER
ANOTHER BOTTLE CAP
CODE](#)

[CLICK HERE TO VIEW
YOUR ACCOUNT](#)

[CLICK HERE TO SHOP](#)

FIG. 14(C)

XYZ CORP BOTTLE CAPS POINTS PROGRAM

YOU HAVE 3,000 POINTS. YOU CAN PURCHASE THE
FOLLOWING ITEMS BY CLICKING ON THE ITEM:

[ITEM 1](#)

[ITEM 2](#)

[ITEM 3](#)

[ITEM 4](#)

[ITEM 5](#)

[ITEM 6](#)

[ITEM 7](#)

[ITEM 8](#)

[CLICK HERE TO ENTER ANOTHER
BOTTLE CAP CODE](#)

[CLICK HERE TO VIEW YOUR
ACCOUNT](#)

[CLICK HERE TO SHOP](#)

FIG. 14(D)

XYZ CORP

BOTTLE CAPS POINTS PROGRAM

YOU HAVE 3,000 POINTS. HERE ARE THE ITEMS THAT
ARE AVAILABLE FOR PURCHASE/BID:

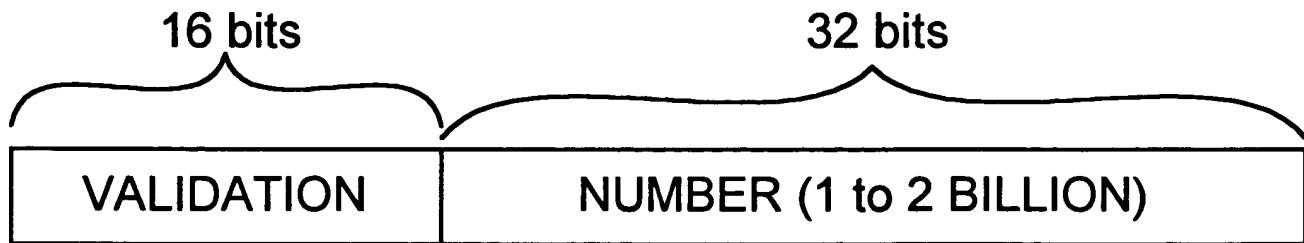
STORE GOODS	SALE POINTS	AUCTION POINTS	COUPONS
ITEM 1	500		50 PTS
ITEM 2	750	610	75 PTS
ITEM 3	1,200	960	100 PTS
ITEM 4	2,800		

ACCOUNT**BOTTLE CAP CODE****SHOP**

FIG. 14(E)

ENCRYPTION

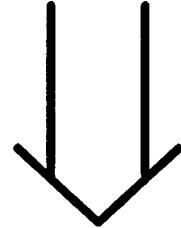
$S1 = 48\text{-bit STRING:}$



$S2 = \text{KEY1 (128 bits)} + \text{NUMBER (32 bits)}$

$S3 = \text{MD5}(S2)$

VALIDATION string = take first 16 MSB of $S3$



$S4 = \text{DES3}(S1, \text{KEY2})$



$S4_{\text{BASE } 29} = 10\text{-DIGIT BOTTLE CAP CODE}$

FIG. 15

VERIFICATION

$S4_{\text{BASE } 29} = 10\text{-DIGIT BOTTLE CAP CODE}$

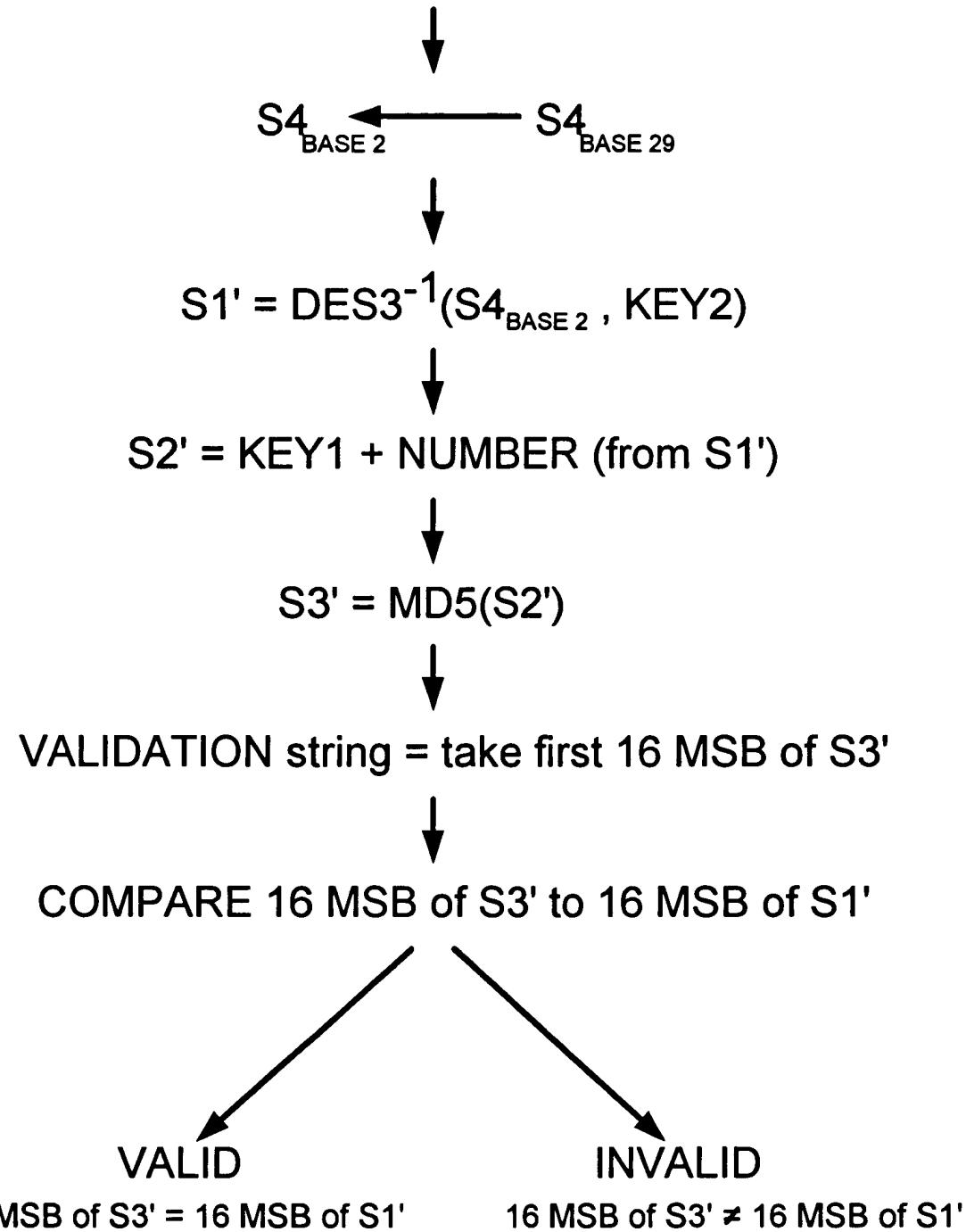


FIG. 16

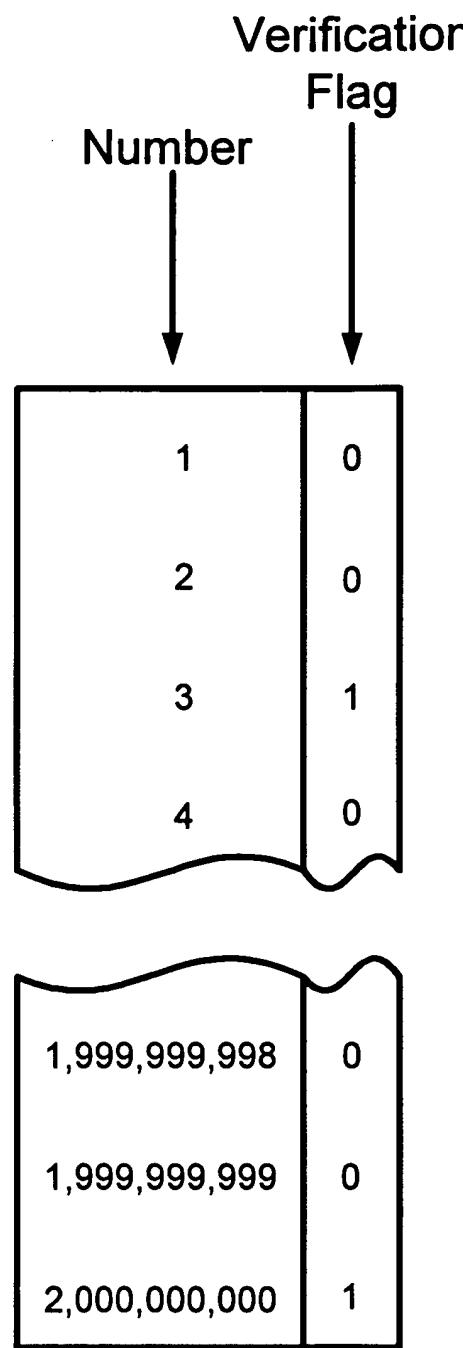


FIG. 17